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Fax Sheet

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FROM Melanie Preusser
DATE February 25, 1998

SUBJECT Draft Summary Minutes; 100 Area Chromium Toxicity Study Working Group
NO OF PAGES 5

Please review the referenced minutes and provide comments to me no later than March 6, 1998. Let me know if you have any questions.

Thanks,

Mel

100 Area Chromium Toxicity Study
Working-Group Meeting
Richland, Washington
February 12, 1998
Summary Meeting Minutes

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Attendees

Dan Audet, USFWS
Julie Campbell USFWS
Dennis Dauble, PNNL
Roger Dirkes, PNNL
Aida Farag, USGS
Larry Gadbois, EPA
Barbara Harper, YIN
Jena Lewinsohn, ECO
Edward Little USGS
Roger Ovink, CHI
Tom O'Brien, USFWS
Melanie Preusser, BHI
Bob Putz, BHI
Rick Roy, USFWS
Wayne Soper, Ecology
Geoff Tallent, Ecology
Darci Teel, BHI
Arlene Tortoso, DOE
Steve Weiss, CHI
Dan Woodward, USGS
Jerry Yokel, Ecology
Jamie Zeisloft, DOE

The United States Geological Survey, BRD-ECRC, Jackson Field Research Station, provided a presentation regarding their laboratory.

Roger Ovink facilitated the discussion regarding the scope of work and objectives for this project.

MAIN GOAL - Determine whether aquatic resources are being injured by Hanford Site contaminants

Fundamentally, nothing has changed from the original scope agreed to by DOE and the USFWS. The main question is still whether injury is occurring as a result of hazardous substances being released at the Hanford Site. At this point, only aquatic resources are being considered. Jamie Zeisloft stated that due to changing situations at the Hanford Site, the group feels the goal can still be met without using the heavy bat of NRDA. The NRTC will not be conducting an official assessment plan. They will, however, look at actual injury, prioritize those injuries, and utilize the limited funding to perform studies based on their prioritization. Geoff Tallent stated that the USFWS will assist in the identification process. Dan Audet stated that a formal process is where legal requirements are met. Since the decision was made not to use the legal process, from a technical aspect, NRDA guidance should be used to the extent possible. Geoff stated that some of the more legal-type documents, such as the PAS, have been removed from the process. However, any Trustee organization can write a PAS if they choose.

Jamie stated that the primary reason for performing this study is to determine injury and provide a remedy as part of the CERCLA cleanup process. Right now, the focus is on the Operable Units (OUs) in the 100 Area; however, there could be other contaminants of concern (COCs) identified in addition to chromium.

Arlene Tortoso stated that aquatic resources seemed to be a fairly broad term. She asked for clarification as to the definition of aquatic resources. Jamie stated that aquatic resources are biological resources. Dan stated it was his understanding that aquatic resources relate to releases affecting the river. Therefore, things such as biota could be considered resources. Larry Gadbois

asked if strontium 90 is still a part of this scope. Geoff stated that, yes, it is being considered. However, the Trustees will need to determine which studies will have priority based on the information supplied by the USFWS.

Dan Woodward suggested that the Trustees may want to perform a study that encompasses economic issues (i.e., a study relating to affects on fish/fishing). Typically, if injury is the only portion of the study, that type of an assessment does not necessarily have an economic justification. Jamie stated that the overall priority is to restore the damaged area. There is opportunity to include restoration in the 100 Area since the final remedy stage has not been reached. Different values should be considered here at Hanford in addition to economic issues (i.e., cultural issues). These studies do not necessarily need a dollar amount tied to them because that is not a part of the formal process.

SECONDARY GOALS

Geoff stated that the assessment plan will break the primary goal into smaller pieces. Whereas the primary goal is limited, the secondary goals breakdown the process. Secondary goals include:

- Provide information for CERCLA cleanup process
- Establish baseline data (Trustees can have reference data to determine injury)
- Provide a better understanding of
  - aquatic resources
  - river interface (e.g., groundwater interface)
- Regional salmon initiatives
- Past injury

Jamie stated that regional salmon initiatives need to be considered due to the Endangered Species Act and the impending listing of salmon and steelhead.

Past injury is not the primary purpose of the study. However, the study will support an understanding or determination of past injury if it occurred. As the primary goal is addressed, the secondary goals should be kept in mind.

The main difference from the original scope of work is that the chromium toxicity study plan has been separated from the other work scope. This was done to help achieve the original goals laid out in the scope. The USFWS is currently working on 2 deliverables, the assessment plan for the overall project and the assessment plan for the chromium toxicity study. The chromium plan is driven by the CERCLA cleanup process and the final remedy schedule. An additional driver is the salmon cycle. Since chromium is already an issues, the decision was made to do this particular study. The study will encompass HR-3 and KR-4 releases and the impacts to aquatic resources. Currently, there is an interim ROD, but a source has not been identified. A decision has been made to proceed with a chromium toxicity study which will start in parallel with another set of studies. This will allow the Trustees an opportunity to make restoration priorities known before the final remedy begins. Hopefully, by tying this study to the CERCLA process, it will prevent a more long-term chromium problem and avoid legal issues down the road.

Rick Roy stated that the chromium study will occur before the assessment plan is finalized. First, the chromium toxicity plan will be written which will lead to the studies. Jamie stated that once issues are identified in the assessment plan, the Trustees will receive a list of potential problems. They can then take the next step by deciding what to study. For planning purposes, a

determination was made as to what other studies would probably need to be done. Along the River in the 100 Area has been an issue with the Trustees for several years. These studies will help to look at the whole picture. CRCIA has already indicated potential risk and the approach to these studies should compliment CRCIA. However, CRCIA's goal is accessing risk and these studies will assess injury. Rick stated that injury is more of a quantification of risk. Damage is more of a demonstration and not a prediction. There may be assumptions in the document that the Trustees do not agree with and will want to study further.

The draft chromium study plan should be complete about one week before the assessment plan. This should not cause a problem with the QA. The assessment plan will be fairly generic while the draft study plan will be more specific. Rick has the lead on the assessment plan and Dan Audet has the lead on the chromium study. Julie Campbell will work on both projects. Rick stated that they were still in the process of reviewing the documents. Barbara Harper asked if USFWS would come back to the working group after the data review and make recommendations. Dan Audet stated that it is not their intention to make recommendations. Instead, they will meet with the working group and relate the type of information they have. The Trustees need to make the decision as to what they want to study. Geoff Tallent stated that was true, however the USFWS needs to give the group specific recommendations in regard to chromium. The group will need to meet by the end of March or the first of April to get feedback on whether or not chromium is the correct study and if there are other broader pathways.

A question was rased as to whether there was a decision point for performing the chromium study. Jamie stated that if the USFWS research indicates this study does not need to be performed, it will not be done. Dan stated that, based on what they have seen so far, there are a lot of data gaps and the study will probably be needed.

Roger Ovink reviewed the expectations of the next working group meeting. Dan Audet will return with results of the literature review, with data gaps identified, and a recommended study approach for chromium quantification. Rick Roy will have a more classical approach to an assessment plan which will include pathway analysis results, a literature review summary, and a list of other items that could be studied. This information will include COCs that are above the standard based on the literature and pathway analysis. They will concentrate on potential pathways and some of the exposures and pathways already been identified.

Darci Teel asked if that presentation would be verbal or written documentation. Jamie stated that the scope for USFWS is to prepare study plans. The actual plan implementation is a separate contract. The agreement calls for a specific number of meetings. Additionally, the working group can travel to Spokane and go through the information with USFWS before a draft is handed out. The initial information will be given verbally to the working group and then a formal presentation can be made to the Trustees. The first dissemination of information will be as basic as possible and the working group will assume a liaison role with the Trustee organizations. A draft assessment plan should be out by May 18 and draft chromium study plan by May 11. Everyone should be prepared for a working group meeting in Spokane in early April with document review to start immediately thereafter.

Rick stated that the chromium toxicity study plan will not be a large document. Much of the chromium information will go into the overall study plan. Geoff asked if there were any impressions from the data review so far. Dan stated that they have discussed how to deal with the issues of data review since it has become an expedited process and is now outside of the normally

followed process. They want to get basic chromium toxicity information that EPA or DOE would be interested in that will not be too complicated a study. He envisions developing a smaller study plan or accomplishing some basic pilot work to make a better determination on what studies to do. Dan Woodward asked if the chromium toxicity study would be related more to current injury or if it should also address remediation. Dan Audet stated that the Trustees would like to know if natural resources are being injured and that will be the main focus of the study. Jamie asked if a problem is discovered that needs to be remedied will there be remedy and solution recommendations. Dan Audet stated that there will be a tie-in if mitigation might add to the problem but he did not know if avoidance should be addressed. Jamie stated that part of what the NRTC has to address is to make sure additional injury does not occur. It is a touchy situation if the remedy may cause more problems than the injury. This is especially true since the River is so sensitive. The CERCLA process will evaluate technologies based on the interim ROD and cleanup standards. The ROD is written to be protective of the environment and aquatic criteria are based on protecting the environment. While looking for the final remedy, data gaps need to be filled to identify if there is a problem we are not yet aware of. That information would become a factor in selecting final remedy. Arlene stated that the results from the study are going to lead to remedy selection within the final remedy. Right now, DOE is currently working to the information they have which is based on ambient water criteria.

A discussion took place regarding worker safety for performing the studies. Other companies already have safety programs to cover working in the 100 Area. A copy of these guidelines will be provided to the laboratory to use as a template. Discussion took place regarding transporting contaminated water off site. Again, this issues needs to be dealt with, however, there is information available for the laboratory to use as a template. Jamie stated that the other important thing for the laboratory people to be aware of is cultural resources.

Dennis Dauble stated that there is a critical issue to remember when developing the exposure scenarios. When reviewing the documentation, the interface between groundwater and surface water is critical to the whole assessment. That information will need to be well developed. Dan Woodward stated that they plan to consult people who have been working in the field at Hanford since this is a different scenario than they normally encounter.

Action:
Aida provide a copy of the QA plan to Jerry Yokel
Provide copies of health and safety plans to Aida